

FINAL TECHNICAL REPORT

REPORT No. AR-0142-96-004

September 1, 1996

GUIDANCE, NAVIGATION, AND CONTROL DIGITAL EMULATION TECHNOLOGY LABORATORY

Contract No. DASG60-89-C-0142

Sponsored By

The United States Army Space and Strategic Defense Command

COMPUTER ENGINEERING RESEARCH LABORATORY

Georgia Institute of Technology

Atlanta, Georgia 30332-0540

Contract Data Requirements List Item A005

Period Covered: Total Contract

Type Report: Final

DISTRIBUTION STATEMENT A

**Approved for public release;
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UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED			1b. RESTRICTIVE MARKINGS		
2a. SECURITY CLASSIFICATION AUTHORITY			3. DISTRIBUTION / AVAILABILITY OF REPORT 1) Approved for public release; Distribution is unlimited 2) (continued on reverse side)		
2b. DECLASSIFICATION / DOWNGRADING SCHEDULE			5. MONITORING ORGANIZATION REPORT NUMBER(S)		
4. PERFORMING ORGANIZATION REPORT NUMBER(S) AR-0142-96-004					
6a. NAME OF PERFORMING ORGANIZATION School of Electrical and Com- puter Engineering, Ga. Tech		6b. OFFICE SYMBOL (If applicable)	7a. NAME OF MONITORING ORGANIZATION U.S. Army Space and Strategic Defense Command		
6c. ADDRESS (City, State, and ZIP Code) Atlanta, Georgia 30332		7b. ADDRESS (City, State, and ZIP Code) P.O. Box 1500 Huntsville, Alabama 35807-3801			
8a. NAME OF FUNDING / SPONSORING ORGANIZATION		8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER DASG60-89-C-0142		
8c. ADDRESS (City, State, and ZIP Code)		10. SOURCE OF FUNDING NUMBERS			
		PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT ACCESSION NO.
11. TITLE (Include Security Classification) Guidance, Navigation and Control Digital Emulation Technology Laboratory Final Technical Report (UNCLASSIFIED)					
12. PERSONAL AUTHOR(S) Cecil O. Alford, Roy W. Melton, Philip R. Bingham, Tsai Chi Huang, Toshiro Kubota, and Farzad Ghannadian					
13a. TYPE OF REPORT Final		13b. TIME COVERED FROM 9/28/89 TO 9/27/96		14. DATE OF REPORT (Year, Month, Day) Sept. 1, 1996	
15. PAGE COUNT 5					
16. SUPPLEMENTARY NOTATION					
17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB-GROUP			
19. ABSTRACT (Continue on reverse if necessary and identify by block number) 1. Overview 2. References					
19960924 192					
20. DISTRIBUTION / AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS			21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED		
22a. NAME OF RESPONSIBLE INDIVIDUAL			22b. TELEPHONE (Include Area Code)		22c. OFFICE SYMBOL

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1. OVERVIEW

The original contract began September 28, 1989 and was scheduled to terminate September 27, 1994. A no-cost extension was approved extending the termination date to September 27, 1996. This final report covers all the technical work done under this contract.

The contract began with seven tasks; (1) Digital Emulation Facility, (2) FPA Seeker Emulator Development, (3) Special Studies, (4) Software Development, (5) Automated Input, (6) PFP Technology, and (7) GN&C Processor Development. These tasks were developed through the first two years of the contract when virtually all funding was removed. Two Annual Reports, consisting of 7 volumes each, report on the technical work during these two years [1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16]. These reports were delivered to USASSDC as AR-90-0142-001 and AR-91-0142-002. No additional reporting on these tasks is given in this report.

Two additional tasks were implemented after the funding cut. The first was a speed test on the rad-hard FPU chip developed by Harris. A summary of this testing is given in the Special Technical Report, STR-93-0142-015 [17].

The second task was the development of an FPA Test System. This task was completed January 31, 1996 with a demonstration of the two units at Georgia Tech to USASSDC representatives. The two units were accepted by the government and are to be delivered to the government in accordance with their shipping orders. The work on these two systems was documented in a Special Technical Report, STR-96-0142-018 [18].

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